

combination of these references, Applicant would first like to explain the problems of the prior art network monitoring systems and the contribution made by the inventor in solving these problems.

As made clear by Bruins and Merriam, there are generally two architectures used to measure network traffic: passive and active traffic measurements. Passive traffic measurements have a low impact on a network and are relatively inexpensive to make, but only provide traffic accounting—not quality of service information (delay and response time). (See background of Bruins). Active traffic measurements do provide quality of service information, but are expensive and intrusive. (See background of Merriam, and background of specification).

Prior to Applicant's invention, companies tended to focus on one or the other of these measurement strategies—passive measurements for traffic accounting, and active measurements for quality of service monitoring. In contrast to these separate approaches, Applicant has invented a hybrid approach that combines the strengths of these approaches. That is, passive measurements are used to provide an inexpensive overview of traffic on the network and allow high value targets to be automatically selected, so that the maximum benefit (in terms of profiling the performance that most active users see) is derived for the smallest number of active tests. Additionally, the cost/time typically involved in configuring an active monitoring system is significantly reduced, since the targets are now automatically selected.

Despite the Examiner's latest clarification of the suggestion to combine the teachings of Bruins and Merriam, Applicant respectfully submits that such combination is still improper. In particular, in attempting to link the two references, the Examiner has pointed to basic commonalities between the references that can be found in any network where it is desirable to perform traffic measurements. However, more than that is required to combine the teachings of the references.

For example, the Examiner points to the statement in the Abstract of Bruins that the system disclosed therein can be used to adjust features or parameters of the network. Applicant does not disagree that one of the purposes of both systems described in Bruins and Merriam is to adjust the features or parameters of the network—indeed, it is the reason why networks are tested, either through passive measurements or active measurements. Applicant, however, does not agree that a terse statement merely stating that passive measurements can be used to improve the features or parameters of a network somehow suggests to one of ordinary skill in the art that active measurements of a target of interest can be performed based on packet information extracted from passive measurements. Again, it only states the obvious—that it is desirable to improve the operation of networks—and suggests nothing else. Applicant would venture to say that if a suggestion to combine references could be based on a general statement that it would be nice to improve the features and parameters of a system, then otherwise valid innovations on data networks, or any other system for that matter, could not be patented, since it is always desirable to improve the features and parameters of a network or system.

At most, this statement suggests that the features and parameters of a network, such as that disclosed in Bruins, can be improved by performing active measurements. The question remains, how? The only answer found in these references is by performing the active measurements in the exact same manner described in Merriam. There is no suggestion that the passive and active measurement aspects of the systems of Bruins and Merriam be combined, and certainly no suggestion to combine these aspects in the manner required by the claimed invention. At most, there is only a suggestion that passive and active measurements can be performed independently of each other to perform different traffic measurements to improve different parameters and features of a network.

As another example, the Examiner states that Bruins collects flow data related to web and http services, and Merriam performs active tests on network devices hosting web and http services. Again, these are common attributes that are addressed by any traffic measurement system, and is a far cry from suggesting to one of ordinary skill in the art that active measurements of a target of interest can be performed based on packet information extracted from passive measurements. Again, at most, Bruins and Merriam suggest that the hosting web and http services disclosed in Bruins can be improved by performing active measurements, but does not suggest how such improvements would be made other than performing the active measurements in the exact same manner described in Merriam—not in the manner required by the claimed invention.

Applicant reiterates that a suggestion to combine the references in the manner set forth by the Examiner can only come from the detailed description of the instant specification, which the Examiner cannot use. Instead of starting with the claims, and working backwards, Applicant respectfully requests that the Examiner look to the prior art and work forwards from there in attempting to determine whether the combination of Bruins and Merriam is proper. For example, the prior art problem addressed by Applicant was the increased expense and intrusiveness of active measurement systems. This problem is certainly not addressed by Bruins, which discloses a passive measurement system for improving the features and parameters of a network as all passive measurement systems ultimately do, and is not addressed anywhere in Merriam, which attempts to more accurately determine delays in a network. In contrast, the Applicant has addressed this problem by focusing the active measurements on the targets where network traffic is most likely to be found. Applicant has specifically accomplished this by passively measuring network traffic to determine the most likely targets. This, the Examiner cannot use in the obviousness analysis.

Applicant is aware that a suggestion to combine references need not relate to the same problem addressed by an applicant, but can also relate to problems addressed by the prior art as well. However, there is no suggestion to combine the references to solve the problems disclosed therein either. Being that the teachings of Merriam are being used by the Examiner to modify the system of Bruins, the problem solved by Merriam would be relevant. In particular, as previously stated, Merriam is concerned with a means for more accurately quantifying the delays in a network, supposedly so that the network can be improved. The most that this suggests is that an active measurement means can be incorporated into the Bruins system to address this problem. Thus, not only does Bruins and Merriam fail to suggest the claimed invention for the purpose of focusing active measurements on targets to decrease the expense and intrusiveness of the system, Bruins and Merriam fail to suggest the claimed invention for any other purpose.

Thus, Applicant submits that the claimed invention is not obvious over the combination of Bruins and Merriam, and as such, respectfully requests withdrawal of the rejection of these claims. To the extent that the Examiner maintains the rejection of the claimed invention over Bruins and Merriam, rather than pointing to obvious features common to all data networks (i.e., that it would be desirable to improve the network parameters and features or to improve website and http services) in an attempt to link the two references in the manner taught by the application, Applicant respectfully implores the Examiner to point to passages in these references that truly suggest that the Bruins system should be modified to include an active measurement system that uses the passive measurements to focus the active measurements on targets—or at the least, passages that suggest combining the aspects of active and passive measurement systems in any integrated manner.

Based on the foregoing, reconsideration and allowance of the claims is respectfully requested. If the Examiner has any questions or comments regarding this amendment, the Examiner

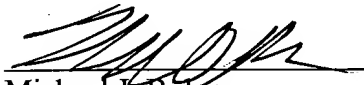
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Respectfully submitted,

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